

**APPARATUS AND METHOD FOR INTER-PROGRAM AUTHENTICATION
USING DYNAMICALLY-GENERATED PUBLIC/PRIVATE KEY PAIRS**

ABSTRACT OF THE DISCLOSURE

In a multi-tiered computing environment, a first program may authenticate with a
5 second program using dynamically-generated public/private key pairs. An authentication
token is constructed that includes user information and information about the first
program and the second program. The first program then digitally signs the
authentication token using the dynamically-generated private key, and sends the
authentication token to the second program. The second program then verifies the
10 authentication token using the public key corresponding to the first program. Once
verified, the first program is authenticated to the second program. The second program
may then authenticate to a next-tier program by constructing an authentication token that
includes the information in the authentication token received from the first program. This
may continue to any suitable number of tiers, using dynamically-generated public/private
15 key pairs to allow authentication between programs without requiring any user interaction
or input from a system administrator.